

**REMARKS**

The above newly entered paragraph(s) and the accompanying marked-up paragraph(s) of the specification overcome some informalities noted in the specification on file. The undersigned avers that the newly entered replacement paragraph(s) of the specification do not contain any new subject matter.

Please consider newly entered claims 11-16 upon substantive consideration of this application.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,

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[001] A METHOD AND AN APPARATUS FOR IDENTIFICATION AND CONTROL OF HANDLING OF KEYS AND THE LIKE

[002] **FIELD OF THE INVENTION**

[003] The present invention relates to a method for identification and control of the handling of keys and the like according to the preamble of claim 1. The invention also relates to an apparatus for carrying out the method set forth in claim 1 according to the preamble of the first apparatus claim.

[004] **SUMMARY OF THE INVENTION**

[005] In e.g. offices, factories, hospitals, hotels, security companies, car repair shops and car rental services, mail-carrying companies, shipping agencies, banks, apartment buildings, real estate companies etc usually a relatively large number of keys for various properties, apartments, rooms, file cabinets, safe-deposit boxes, cars etc are circulated. The keys are used by a fairly large group of people and so far it has been difficult or impossible to e.g. keep track of the whereabouts of certain keys/persons at certain points of time. Mistakes and neglects can easily occur, when the key cabinet is used and also when keys are manually handed out and this is registered. Also, all personal handling is very time consuming and expensive.

[006] In order to avoid to a large extent the last mentioned drawbacks electronic circuitries including IC-circuits have already been used, which can identify certain used codes, which are associated with a loose object. However, partly the design of these electronic circuitries is imperfect and limited and partly their applications are defective and impractical, and consequently e.g. the security cannot be guaranteed and a reliable survey of the situation is lacking.

[007] US-A-4 549 170 relates to a system for handling a key panel. The panel is designed for a very large number of, namely one thousand, keys, which mutually can and presumably should vary rather strongly (see Figs 1 and 2). Each key with its special design will be used in a particular corresponding special opening having a fitting module in said panel (see column 3, lines 9-15).

[008] This may cause a difficult search, in case corresponding numbers are not available. The keys are completely conventional but designed to, when they have

[011] **BRIEF DESCRIPTION OF THE DRAWINGS**

[012] Additional characterizing features and advantages of the invention are set forth in the following description, reference being made to the enclosed drawings, which show a few preferred but not limiting embodiments. The drawings show in detail in

[012] **The invention will now be described, by way of example, with reference to the accompanying drawings in which:**

[013] Fig. 1 is an apparatus according to the invention with a perspective view from one end, from above and from the front, of a control and indication unit;

[014] Fig. 2 is a perspective view of the outer end of an identification and control device, which is a part of the apparatus according to Fig. 1;

[015] Fig. 3 is a diametrical longitudinal section through the device according to Fig. 2;

[016] Fig. 4 is the unit according to Fig. 1 in an end view from the left in Fig. 1;

[017] Fig. 5 is a diametrical cross-section of the unit according to Fig. 1; and

[018] Fig. 6 is a view of a modified apparatus, which is similar to the apparatus shown in Fig. 4.

[019] **DETAILED DESCRIPTION OF THE INVENTION**

[020] An apparatus 1 according to the invention is shown in its entirety. It comprises three main components, namely at least one control and indication unit 2, a plurality of identification and control devices 3, designed for unit 2 as well as a control center 4. Said unit is shown in the drawings as a strip for 14 pin-shaped identification and control devices. The shown strip shape is only one example, which can be replaced by any other suitable shape, e.g. the rear or interior side of a key cabinet. The pin shape of said device is also only an example, which can be replaced by any other suitable shape. The number of units and devices can vary within certain limits. Also, more than one center can be used.

[021] Strip 2 comprises a frame work with a U-shaped cross-section made of metal sheet, the free longitudinal edges of legs 11,13 of which end in away from